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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/749,788      | 12/30/2003  | Kil-Ho Jeong         | 51876P568           | 1090             |

8791 7590 12/31/2007  
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| EXAMINER |
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VUONG, QUOCHIE B

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| ART UNIT | PAPER NUMBER |
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2618

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12/31/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                               |                              |  |
|------------------------------|-------------------------------|------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/749,788 | Applicant(s)<br>JEONG ET AL. |  |
|                              | Examiner<br>Quochien B. Vuong | Art Unit<br>2618             |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 12/30/2003 and 03/18/2005 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1-6 and 8 are rejected under 35 U.S.C. 102(a) as being anticipated by Lechner et al. (EP 1199867A1).

Regarding claim 1, Lechner et al. (see abstract; figures 1 and 2) disclose an apparatus for automatically detecting the presence of a strobo (10) in an earphone jack port (4) of a mobile terminal (1), the apparatus comprising: connection means (4) for electrically connecting an earphone/microphone set or a strobo to the mobile terminal

and generating level information if one of an earphone/microphone set or a strobe is connected to the mobile terminal (column 5, lines 27-35); sense means (7) for determining whether the earphone/microphone set or the strobo is electrically connected to the connection means according to the level information and generating an indication signal containing a determination result (column 5, line 58 – column 6, line 15); main process means (5) for generating a control signal to control the earphone/microphone set or the strobo according the indication signal; and strobo control means for controlling strobo by receiving the control signal from the main process means (column 5, line 18 – column 6, line 15)

As to claim 2, Lechner et al. disclose the apparatus further comprising call control means for generating a call signal indicating whether or not the mobile terminal is used for originating a call; and earphone/microphone set control means for controlling an earphone/microphone to pass voice signal to a voice input/output unit in the mobile terminal according to the level information and the call signal (column 4, lines 48-58; and figure 1).

As to claim 3, Lechner et al. disclose wherein the main process means generates the control signal to enable the strobo control means if the indication signal represents that the strobo is connected to the connection unit and generating a shot signal and a charge control signal (column 5, line 58 – column 6, line 15; and column 6, line 42 – column 9, line 21)

As to claim 4, Lechner et al. disclose wherein the strobo control means controls the strobo according to the shot signal and the charge control signal from the main process means (column 6, line 42 – column 9, line 21).

As to claim 5, Lechner et al. disclose wherein the main process means generates the control signal to enable the earphone/microphone set control means if the indication signal represents that the earphone/microphone set is connected to the connection unit column 6, line 42 – column 9, line 21).

As to claim 6, Lechner et al. disclose wherein the connection means generates the level information having a voltage level and the sense means generates the indication signal by analyzing the voltage level in the level information column 6, line 42 – column 9, line 21).

Regarding claim 8, Lechner et al. (see abstract and figures 1-2) disclose a method for automatically detecting the presence of a strobo (10) in an earphone jack port (4) of a mobile terminal (1), the method comprising the steps of: a) obtaining level information from a connection unit (column 7, line 21 – column 8, line 20); b) determining whether an earphone/microphone set or a strobo is electrically connected to the connection unit according to the level information (column 8, line 20-29); c) enabling a strobo control unit if the strobo is electrically connected to the connection unit as a determination result of step b) (column 8, line 30 – column 9, line 21); and d) enabling the earphone/microphone set control unit if the earphone/microphone set is electrically connected to the connection unit as a determination result of step b) (column 8, line 30 – column 9, line 21).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lechner et al.


Regarding claim 7, Lechner et al. disclose the apparatus of claim 1 above; in addition, it would have been obvious for the apparatus of Lechner et al. including wherein the connection means includes: a microphone/charge-control signal end for providing a connection to both the microphone end of the earphone/microphone set plug and the charge-control signal end of a strobo plug; a speaker/shot end for providing a connection to both the speaker end of the earphone/microphone set plug and the shot end of the strobo plug; a switch end for making known which of the following, the earphone/microphone set or the strobo, is electrically connected to the earphone-microphone set/strobo connection means while the earphone-microphone set/strobo connection means is physically connected to the speaker/shot end; and a ground end for providing a connection to the ground end of the earphone/microphone set plug as well as the ground end of the strobo plug since the arrangement is just a system design performing the same function of detecting the present of the earphone/microphone set or the strobo connection to the mobile terminal (see column 6, line 42 – column 9, line 21).

**Conclusion**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quochien B. Vuong whose telephone number is (571) 272-7902. The examiner can normally be reached on M-F 9:30-18:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
QUOCHIE B. VUONG  
PRIMARY EXAMINER

Quochien B. Vuong  
Dec. 26, 2007.